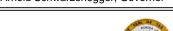
#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

69.28 File #:

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-009767

Address: 333 Burma Road **Date Inspected:** 26-Oct-2009

City: Oakland, CA 94607

**OSM Arrival Time:** 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Xu Xian Ping No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

OBG & TOWER Components **Bridge No:** 34-0006 **Component:** 

**Summary of Items Observed:** 

On this date Caltrans OSM Quality Assurance (QA) Inspector, Sandeep Kumar was present during the times noted above for observations relative to the work being performed.

#### BAY 2

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint # 059 located on FB3054 – 001. Welder is identified as 045209. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T -2232 - Tc - U4b - F.

FCAW process welding of weld joint # 113 located on FB3031 – 001. Welder is identified as 062438. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T -2132-3.

FCAW process welding of weld joint # 043 located on FB3002 – 001. Welder is identified as 048433. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T -2232 - Tc - U4b - F.

FCAW process welding of weld joint # 135 located on FB3031 – 001. Welder is identified as 062438. ZPMC QC

## WELDING INSPECTION REPORT

(Continued Page 2 of 4)

is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T -2133.

#### BAY 3

The following NDT inspection carried out as per the ZPMC submitted Notification No. 004481 Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

- 1. CA084 055~060
- 2. CA086 067~072
- 3. CA085 043~048
- 4. CA087 079~084
- 5. CA088 079~084
- 6. CA079 055~060
- 7.  $CA080 067 \sim 072$
- 8. CA081 031; 103; 104
- 9. CA082 079~084
- 10. CA083 019~024

#### Ultrasonic Testing

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

- 1. CA084 045; 046
- 2. CA086 033; 034
- 3. CA085 021; 022
- 4. CA087 033; 034
- 5. CA088 045; 046
- 6. CA079 021; 022
- 7. CA080 021; 022
- 8. CA081 021; 022
- 9. CA082 021; 022
- 10. CA083 021; 022

#### BAY 5

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint # 009 located on Traveler Rail 10TR3 – 028. Welder is identified as 205390. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2132.

## WELDING INSPECTION REPORT

(Continued Page 3 of 4)

FCAW process welding of weld joint # 001 located on Traveler Rail 11TR8 – 002. Welder is identified as 204342. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2232 - Tc - U5 - F.

FCAW process welding of weld joint # 011 located on Traveler Rail 10TR3 – 022. Welder is identified as 217185. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2132.

BAY 6

Tower

This QA Inspector observed the following work in progress:

SMAW process welding of weld joint #1B located on ND1 – SA658 –65M – 8. Welder is identified as 048617. ZPMC QC is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS - 485 - SMAW - 1G(1F) - FCM - Repair - 1.

SMAW process welding of weld joint #2A located on Tower Strut WD1 – A305 – 65M – 1. Welder is identified as 053753. ZPMC QC is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS -485 - SMAW - 2G (2F) - FCM - Repair - 1.

SMAW process welding of weld joint #1B located on ND1 – SA658 –65M – 2. Welder is identified as 048617. ZPMC QC is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS - 485 - SMAW - 1G(1F) - FCM - Repair - 1.

BAY9

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint # 183 located on Deck Panel DP3062 – 001. Welder is identified as 059443. ZPMC QC is identified as Chen Shigang. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2133.

FCAW process welding of weld joint # 201 located on Deck Panel DP3062 – 001. Welder is identified as 059378. ZPMC QC is identified as Chen Shigang. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2233 - Tc - U4b - F.

**BAY 10** 

The following NDT inspection carried out as per the ZPMC submitted Notification No. 004486 Magnetic Particle Testing

# WELDING INSPECTION REPORT

(Continued Page 4 of 4)

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member is identified as TOWER Component. The weld designations reviewed are as follows:

NORTH TOWER LIFT 3 - A/E CORNER SEAM - 99M DIAPHRAGM POSITION NSTL3 - 3B/K - 84A

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

## **Summary of Conversations:**

No Relevant Conversations.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang - 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar,Sandeep	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer